## (57) Abstract

This invention relates to routing in a communication network. The invention offers a method to make a protected routing through all the layers of a communication network. The bottom layer is the foundation for all protected routes. The routing order is from bottom to top. First, the first layer above the bottom layer is routed into the bottom layer. The links which do not need protection can be routed via the shortest path. The links which need protection are routed in a way that there exist two, as short as possible, separate paths. The other links are routed in a similar way. Finally the top layer is routed into the layer below the top layer.

(Fig. 4)